TB CARE I

TB CARE I - Afghanistan

Year 3

Annual Report

October 1, 2012 –September 30, 2013

October 31, 2013

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List of Abbreviations

APA2	Annual Plan of Activity for year two
APA3	Annual Plan of Activity for Year three
BPHS	Basic Package of Health Services
CB-DOTS	Community Based DOTS
CCM	Country Coordination Mechanism
CHW	Community Health Worker
DOT	Direct Observed Treatment
DOTS	Direct Observed Therapy Short course
DST	Drug Sensitivity Testing
EQA	External Quality Assurance
GCMU	Grant Contract Management Unit
GF	Global Fund
HCW	Health Care worker
HFs	Health Facilities
HMIS	Health Management Information System
HRD	Human Resource Development
HSS	Health System Strengthening
IC	Infection Control
JICA	Japanese International Cooperation Agency
KNCV	Netherland's Tuberculosis Program
LEPCO	Leprosy and Tuberculosis Control Program
M&E	Monitoring and Evaluation
MDR	Multi Drug Resistance
MOPH	Ministry of Public Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization
NSS+	New Sputum Smear Positive
NTP	National Tuberculosis Program
OPD	Out Patient Department
OR	Operational Research
PCH	Performance Contract for Health
PHD	Provincial Health Directorate
PHO	Public Health Office
PTC	Provincial Tuberculosis Coordinator
SOP	Standard Operational Procedure
TB	Tuberculosis
TB CAP	Tuberculosis Control Assistance Program
TB IC	Tuberculosis Infection Control
TBIS	Tuberculosis Information System
TOT	Training of Trainer

USAID	United States Agency for International Development
USD	United States Dollar
WHO	World Health Organization

Executive Summary

TB CARE I is a United States of Agency for International Development (USAID) four year project started at Jul 2011 and will end in end December 2014. Year three of the project started in October 2012 and ended in September 2013. There are three international partners such as World Health Organization, Management Sciences for Health (MSH), and KNCV. Locally, in partnership with ministry of public health (MOPH), Non-governmental Organization (NGO) and National TB program (NTP), we are implementing the TB CARE I project. The TB CARE I intervention areas are 13 provinces: Kabul, Baghlan, Bamyan, Khost, Paktiya, Paktika, Ghazni Jowzna, Faryab, Kandahar, Herat, Kunduz and Badakhsha. The total annual ceiling was 2,425,793.
During year three of the project in TB CARE I intervention areas, collectively 103,335 presumptive TB cases were identified and screened for TB. Of them, 7,866 were diagnosed as sputum smear positive and 17,631 diagnosed as all form of TB cases. These achievements show a statistically significant improvement in increasing access to TB services. For example, there was a 108% increase in presumptive TB cases identification and screening, from 49,630 in 2009 to 103,335 in 2013, and a 27% increase in sputum smear positive TB case notification, from 6,139 in 2009 to 7,868 in 2013. Finally, there was a 42% rise in all forms TB notification from 12,454 in 2009 to 17,631 in 2013.

The Urban DOTS implementation in densely populated area of Kabul city led to improved access to TB services. For example, the DOTS coverage rose by 66% from 20% in 2009. Also, notification of all forms of TB cases improved by 76% in 2013 (3,400) compared to the 2009 baseline (1,934).. More importantly, treatment success rate improved remarkably from 49% in 2009 to 75% in 2012 and the sputum conversion rate from 46% to 76%.

Community based DOTS is another innovative approach that was introduced in Afghanistan to ensure access to TB services in remote and hard to reach areas. For instance, 17% of all suspected TB cases identified and screened for TB were identified by community health workers (CHWs). In total 7,946 suspected cases identified in 2013 and 39% of all TB patients received their daily pills from CHWs at their villages that improved the treatment outcome e.g. treatment success rate, for those TB patients who received their daily observed therapy (DOT) from CHWs, found to be 98% compared to facility based treatment outcome of 91% treatment success rate.

Tuberculosis infection control was first introduced to NTP Afghanistan by TB CAP project in 2009 and was followed by TB CARE I. During year three of the project, in total 323 individuals from health care staff were trained on TB IC implementation and follow up so as to provide safer working environment to health care staff. Moreover, 20 health facilities were renovated for TB infection control, 20 TB IC committees established and conducted regular meetings and 5,000 pieces of information education and communication material were developed and printed.

The surveillance system of NTP was shifted form paper based to electronic reporting system and further integrated into national health management information system (HMIS). Also, almost 1,800 individuals attended quarterly review workshops in thirteen provinces and 135 senior NTP and MOPH staff attended the annual national evaluation workshop in May 2013. During these events, feedback was provided to health care staff on their performances and practical suggestion on reaching strategic objective of increasing case detection, adherence to treatment provided and they were assisted to analysis their quarterly performances and set targets for next quarter. The annual national evaluation workshop was the opportunity for all stakeholders from policy up to implementation levels to assess the TB situation in country and implement the new and innovative approaches to meet the strategic objectives of TB control program and they set measurable objectives for next year. Moreover, TB CARE I helped NTP to conduct two operational research studies on priority TB areas.

Introduction

The United States Agency for International Development (USAID) continuously assisted government of Afghanistan and Ministry of Public Health (MOPH) in particular since 2003. It supported national TB program since 2003 through Rural Expansion of Afghanistan Community Health (REACH), also, it continued its support since 2008 through TB CAP project. Currently, TB CARE is a USAID funded five years project effective from October 2011. TB CARE I in partnership with MSH, KNCV, WHO internationally and BRAC, NTP, WHO and Basic Package of Health Services (BPHS) implementers locally, assists the NTP to implement its strategic plan from 2009 to 2015 and to achieve its objectives. TB CARE aims to improve DOTS coverage, case detection, and treatment, which results in reducing the number and percentage of TB patients who default from TB treatment and to improve the TB treatment success rate. TB CARE focuses on strategic areas and challenges to assist the NTP in improving the management and technical capacities of the central and intermediate TB teams as well as expanding quality DOTS.

The TB CARE I Afghanistan project works in 13 provinces and provides technical and financial assistance to NTP to implement its strategic plan and achieve its strategic objectives and goals. Thus, TB CARE I helps the NTP in four technical areas:

1. Increasing access to TB services through innovative approaches of DOTS implementation in densely populated areas of Kabul city and community based DOTS (CB-DOTS) implementation in 13 provinces

2. Health system strengthening through renovation of health facilities, training of health care staff, development, printing and dissemination of TB guidelines, SOPs for case detection and TB IEC materials.

3. TB infection controls (IC)

4. Strengthening the monitoring & evaluation, surveillance system and operation research by providing assistance to the NTP on the implementation of electronic reporting system, annual national evaluation of TB program, and the conduction of research in NTP priority areas.

TB CARE I in Afghanistan is implemented in partnership internationally with the World Health Organization (WHO) and KNCV. Nationally, CB-DOTS contracted with six non-governmental organizations (NGO) that are lead implementers of a basic package of health services (BPHS) in six provinces. In the rest of seven provinces, it contracted with Bangladesh Rural Advancement Committee (BRAC) to complement the Global Fund (GF) CB-DOTS component.

Entirely, TB CARE I assists the NTP in the implementation of DOTS in 13 provinces located in six different zones. The total population in TB CARE I intervention areas are 14,126,100 located in 13 provinces of Kabul, Bamyan, Baghlan, Khost, Paktia, Paktika, Ghazni, Kandahar, Herat, Faryab, Jowzjan, Baghlan, Takhar and Badakhshan.

In total, the year three budget was USD 2,227,225.

Core Indicators

TB CARE I has seven core indicators that the program as a whole is working to improve across all countries. Table 1 summarizes the core indicator results across the life of the project for TB CARE I Afghanistan. The results for 2013 will be reported during next year.

Table 1: TB CARE I core indicator results for Afghanistan

Indicators	2010 (Baseline)	2011 (Year 1)	2012 (Year 2)
C1. Number of cases notified (all forms)	28,237	28,167	29,578

C2. Number of cases notified (new confirmed)	12,947	13,789	13,224
C3. Case Detection Rate (all forms)	47%	46%	57%
C4. Number (and percent) of TB cases among HCWs*	NA	10	NA
C5. Treatment Success Rate of confirmed cases	87	90	NA
C6. Number of MDR cases diagnosed	19	22	39
C7. Number of MDR cases put on treatment	0	21	39

* The routine surveillance system does not collect this information. TB CARE I assisted NTP to conduct an assessment to identify the TB burden among health care staff in 2010 and during that assessment 10 health care staff were diagnoses with TB.

The TB CARE I contribution to the above improvement is remarkable. For instance, from 2010 - 2012 there have been a large amount of additional TB cases notified compared to previous years in the TB CARE I intervention provinces. In addition, treatment success rate in TB CARE I intervention areas were 83% in 2009 and reached 90% in 2012. Innovative approaches such as urban DOTS and CB-DOTS contributed to the case notification of past three consecutive years significantly. For instance, cases notified in Kabul reached to 3,400 in 2013 from just over 1,934 in 2009. Also, during APA3 the case notification rate for all forms of TB cases was 125 per 100,000 people while the national value was 114 per 100,000 people in 2012. Table 2 shows the cases notified in TB CARE I intervention provinces in APA3.

Summary of Project Indicators and Results

Table 3: TB CARE I-Afghanistan Year 3 indicators and results

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline for Y2 (timeframe)	Target Y3	Result Y3	Comments
Universal Access							
#	Increased quality of TB services delivered among all care providers (Supply)	Urban health facilities (public and private) offering DOTS services in Kabul city	Number of TB cases (all forms) identified by Urban health facilities in Kabul city	2,728	3,274	3400	Following the assessment and data accuracy of CB-DOTS data in some provinces we have found the over reporting, thus, during APA3 the exact number of suspected TB cases referred by CHWs were less than previous year i.e. CHWs detected 17% of all suspected TB cases identified in 13 provinces.
		Health facilities offering CB-DOTS services	Number of TB suspects identified by community health/community workers in 13 USAID provinces	19,682	27,555	7,969	
Infection Control							
	3.1 Increased TB IC Political Commitment	3.1.3 TB-IC measure included into health facility general IP plan	Number of health facilities that integrated TB-IC into general IP plan	10	20	20	
	3.2 Scaled-up implementation of TB-IC strategies	3.2.2 Facilities implementing TB IC measures with TB CARE support		36	60	60	
	3.3 Strengthened TB IC Monitoring & Measurement	3.3.1 Annual reporting on TB disease (all forms) among HCWs is		No	Yes	Yes	

	3.4 Improved TB-IC human resources	available as part of the national R&R system 3.4.x strengthening staff capacity on TB-IC at all levels	Number of staff trained on TB-IC at national and provincial levels	0	100	320	
Health System Strengthening							
	6.1 TB control is embedded as a priority within the national health strategies and plans, with matching domestic financing and supported by the engagement of partners	6.1.2 CCM and/or other coordinating mechanisms include TB civil society members and TB patient groups		Yes	Yes	Yes	The TB CARE I country director is the voice chairperson for CCM Afghanistan and regularly attends meetings.
	6.2 TB control components (drug supply and management, laboratories, community care, HRD and M&E) form an integral part of national plans, strategies and service delivery	6.2.1 TB CARE-supported supervisory visits conducted		85	90	85%	TB CARE I supported supervisory visits completed till end Sep 2013 210/250.
		6.2.2 People trained using TB CARE funds		895	900	12,761 (male=10,479, female =2,282)	All the trainings from WHO, KNCV and MSH in combined the huge difference owing to change in definition.
Monitoring, Evaluation & Surveillance							

	7.1 Strengthened TB surveillance 7.2 Improved capacity of NTPs to analyze and use quality data for the management of the TB program 7.3 Improved capacity of NTPs to perform operations research	7.1.1 An electronic recording and reporting system for routine surveillance exists at national and/or sub-national levels		Yes	Yes	Yes	The electronic reporting system is in place in the country
		7.2.1 Data quality measured by NTP	TB CARE I provided assistance to NTP to conduct quarterly review workshops in provinces	Yes	Yes	Yes	NTP was assisted in conduction of quarterly review workshops in 13 provinces and in total 1,720 individuals attended these events. Also, during these events feedback provided to NGOs, health care staff and provincial PHO team.
		7.2.2 NTP provides regular feedback from central to intermediate level		Yes	Yes	Yes	
		7.2.3 Strengthening NTP capacity to evaluate TB program	TB CARE I provided technical and financial assistance to NTP to conduct annual national evaluation workshop	21 No	52 Yes	134 Yes	The annual national evaluation workshop conducted for three days and in total 134 staff from all 34 provinces, NGOs, MOPH, PHD attended these events.
		7.3.1 OR studies completed		2	2	2	Two OR on data accuracy and treatment outcome distribution among female TB patients conducted
		7.3.2 OR study results disseminated		No	Yes	Yes	The abstracts of the studies submitted to the Union Conference and accepted for poster presentation at 44th Union Conference

Universal Access

TB CARE I assisted the NTP increase the access to TB services through the implementation of innovative approaches such as DOTS implementation in densely populated areas of Kabul city and community based DOTS to rural areas in 13 provinces. Two partners, World Health Organization (WHO) and Management Sciences for Health (MSH), work in this technical area. Additionally, the CB-DOTS is contracted with non-governmental organizations in six provinces and with BRAC in seven provinces.

Key Results

I. Urban DOTS program in APA3

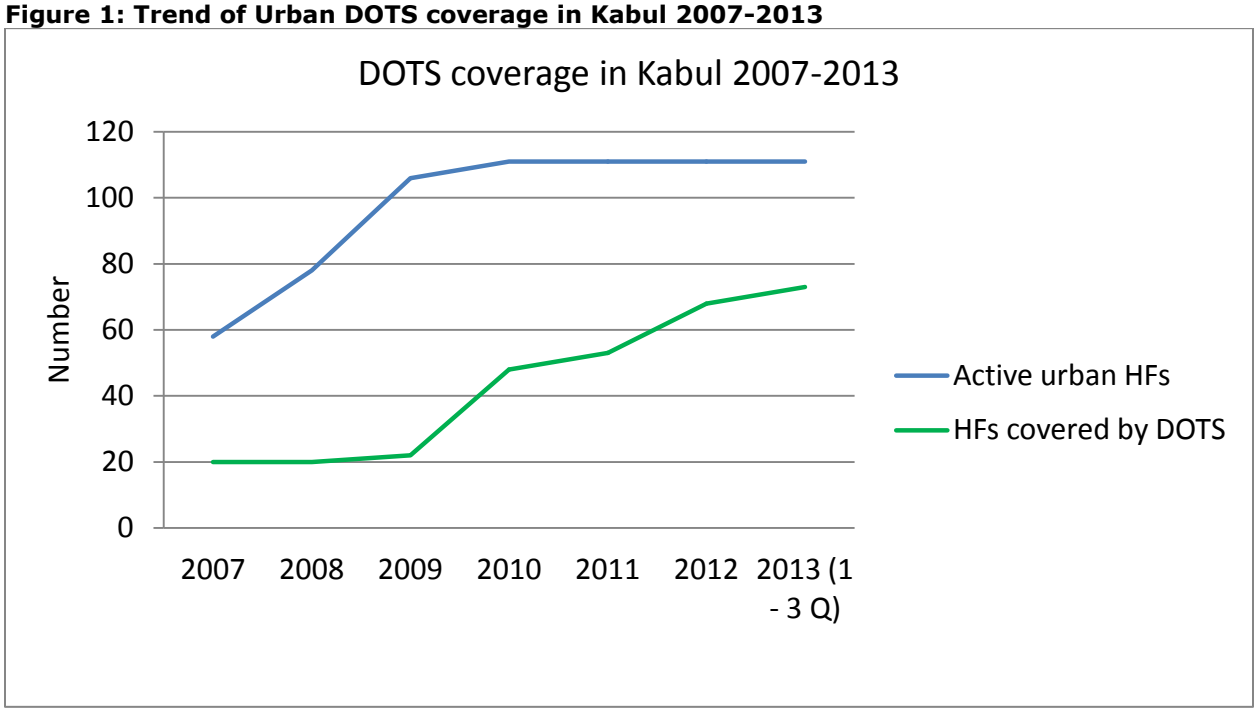
Expand DOTS implementation to additional public and private urban facilities in Kabul city

Kabul city is home to more than five million inhabitants that comprise 15% of country population. This city had the poorest indicators for TB and poor recording and reporting for TB. For instance in 2009, only 1,200 suspected TB cases and 1,934 TB cases of all types identified in the Kabul province. In addition, the case detection rate was 26%, treatment success rate was 49%, and the sputum conversion rate was 47%. The innovative approach of Urban DOTS was first introduced to NTP in 2009. This approach is being implemented by lead partner MSH and cooperative partner WHO.

There are 111 public and private health facilities in Kabul providing DOTS. TB CARE I supported the NTP Urban DOTS program to expand DOTS in to new public and private health facilities during year three of the project (APA3). Based on the Urban DOTS work plan, three new public and two private health facilities were covered by DOTS: health care staff trained on SOPs for case detection, treatment, TB infection control, provision of supply and equipment, close follow up through supervision and monitoring visits, supply of reagents and recording and reporting material. Collectively, 73 public and private health facilities engaged in TB services delivery using the Urban DOTS program in Kabul. In short, DOTS coverage increased from 21% (22) in 2009 to 65.7% (73) in 2013 (figure 1).

Also, the front line staff capacities have been built to provide quality DOTS services to the clients. For example, a standard operating procedure (SOPs) training was provided for 120 health care workers including medical doctors, nurses, lab technicians, and midwives from public and private health facilities. That led to improved identification and examination of presumptive TB cases, screening of outpatient attendees and contact investigation of a TB case. Moreover, TB CARE I was committed to improving the working conditions of health care staff, clients and communities by reducing the risk of TB infection in the working environment. For instance, small grant renovations were provided for four health facilities. As a result of the above mentioned activities, suspect identification rate increased, total number of new sputum smear positive (NSS+) TB cases increased, and finally, sputum smear conversion rate and treatment success rate improved (figure 2, 3 and 4).

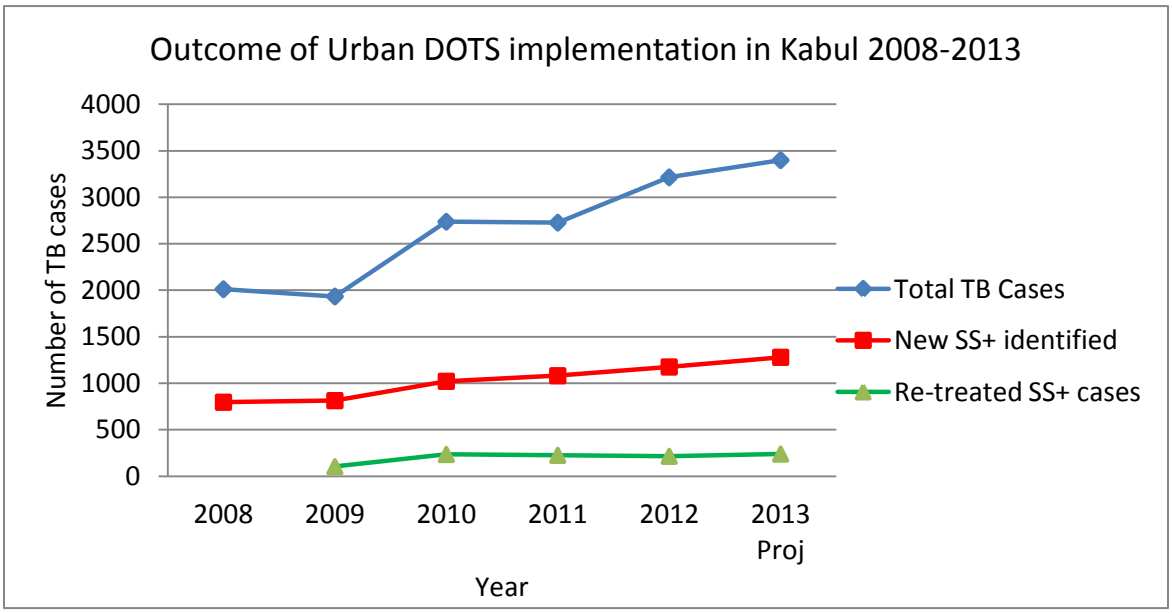
Figure 1: Trend of Urban DOTS coverage in Kabul 2007-2013



TB Suspect, all TB cases and New SS+ notified (2008 – 2013)

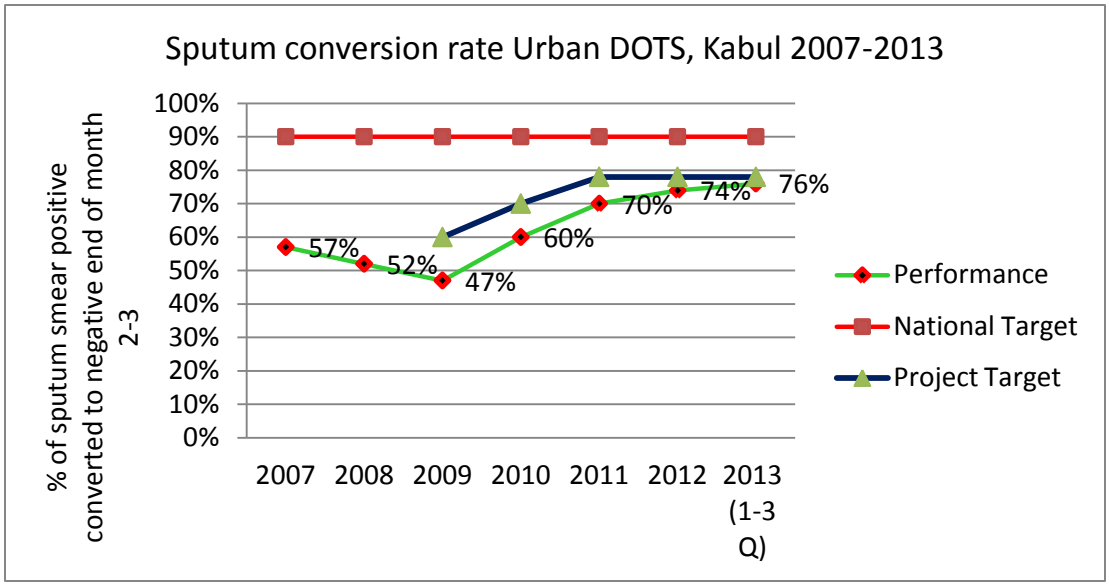
The objective is to assist NTP in early case detection and treatment of TB patients. The practical approach that assists the NTP to reach this goal is the implementation of SOPs for case detection and treatment. Its application in Urban DOTS facilities resulted in not only improved identification of suspected TB cases but also sputum smear positive and other forms of TB cases notified. For instance, suspected TB case identification ascended from 1,200 in 2008 to 13,644 in 2013. Also, sputum smear positive TB cases rose from 797 in 2008 to 1,280 in 2013 and all types of TB cases increased from 2,012 in 2008 to 3,400 in 2013 (figure 2).

Figure 2: Trend of suspected, new sputum smear positive and total number of TB cases notified, 2008-2012



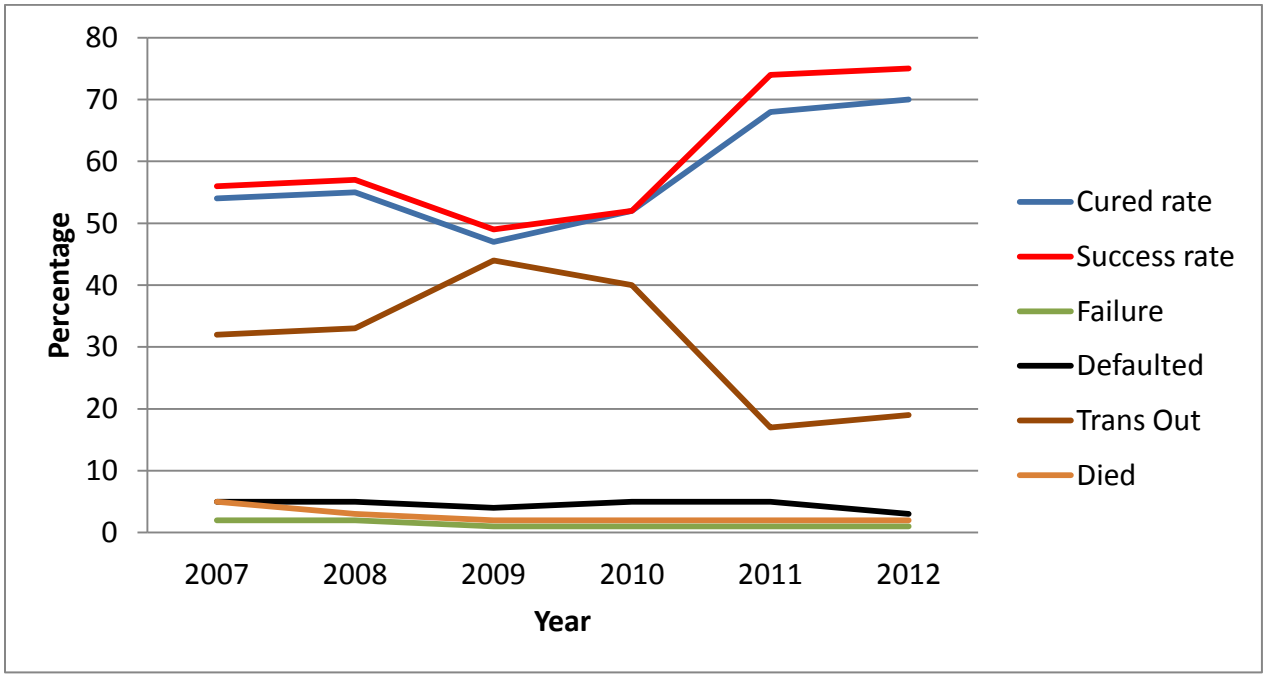
The TB CARE I approach also resulted in improved quality of care at health facilities consequently improved adherence to treatment through close follow up of TB patients under treatment by health care staff. For instance, sputum conversion rate rose to 76% in 2013 compared to 47% in 2009 (figure 3).

Figure 3: **Sputum smear positive cases conversion rate, 2007-2013**



The Urban DOTS approach not only focused on early TB case detection but also on treatment adherence. As a result, treatment success rate rose to 75% compared to baseline of 44% in 2009 (figure 4).

Figure: 4: Trend of treatment outcome in Kabul province, 2007-2012



Achievements:

1. **Conducting urban DOTS Task Force meeting in Kabul city**

Four Urban DOTS Task Force (TF) meetings were conducted and the members were influenced to follow up the decision made at the TF meeting. The NTP ensured proper documentation and implementation of decisions taken during these meetings.

2. **Assist NTP to conduct supervision/monitoring visits from urban DOTS health facilities in Kabul city**

120 supervisory/ monitoring visits(Table 5) were conducted from Kabul urban health facilities to supervise, monitor, and evaluate the DOTS implementation in urban health facilities and provide on the job training and feedbacks to health care workers. Due to the on time supervisory visits, the recording, reporting and referral systems improved and the transfer out rate decreased (see Figure 4).

3. **Assist NTP urban team to improve coordination between public & private health sector and NTP in Kabul city**

For better coordination and cooperation among public and private health sectors and running TB services smoothly in Kabul populated city, the strengthening coordination workshop was conducted and more than 140 individuals from different health sectors participated in this workshop. Public and private health sectors announced their strong commitment for implementation of DOTS in Kabul city.

4. **To implement community awareness events in Kabul city**

To improve community awareness regarding TB and reduce the stigma against TB among community, TB CARE I urban DOTS team conducted TB orientation events for more than 1,200 students of Kabul high schools and universities. Now, most of school student know about signs and symptoms of TB and are able to refer TB suspected patients to the nearest HFs.

In summary, the Urban DOTS program was able to achieve its set targets for APA3. Table 2, illustrates the comparison of planned activities against achievement in during APA2 (Oct 2012-Sep 2013).

Table 5: Urban DOTS plan and achievements during APA2:

Activities	**Plan**	**Achievements**
Expansion of DOTS implementation to additional public and private urban facilities in Kabul city	10	5
Conduct urban DOTS task force meeting	8	4
Conduct refresher trainings for Kabul urban HFs	60	60
Conduct initial trainings for Kabul urban HFs	60	60
Conduct supervision/monitoring visits from urban DOTS HFs	100	120
Renovate urban health facilities in Kabul	5	4
Conduct coordination meeting between public & private health sector and NTP in Kabul city	4	4

Conduct community awareness events in Kabul city	4	4
Conduct strengthening coordination workshop between public and private health sectors	1	1
Submit Urban DOTS abstracts to the Union	1	1
Tree IC committees established	2	2
World TB Day celebrated in Urban DOTS	50	60
Conduct QRM in Kabul	4	4
Community and school events for 1200 individual	1200	1200

Challenges:

- Poor commitment and motivation of public and private health staff (low salary scale and socio-political issues)
- Poor public health infrastructure (e.g. 85 % of Kabul PHD HFs is located in rental houses and relocation of clinics affects the DOTS implementation.
- Neglected basic health care services delivery inside Kabul city (no BPHS implementers)
- Poor coordination mechanism among public and private health sector
- Poor recording of OPD patient in private hospitals and fighting with communicable disease are not in priority.
- Highly populated city in the country (3,950,300/ 15% country population) with high IDPs
- Some national hospitals are not accepting TB in their daily services
- Easy availability of low quality TB drugs in the market
- Low suspect identification in public and private HFs (only 3%)
- SOPs are not implemented properly in some HFs
- Low interest of private health sector to implement TB control activities in their HFs
- Poor referral system among public-private health facilities (poor feedback mechanism and patient follow up)
- Low interest of community to seek health care services through public HFs
- Poor community awareness and stigma in TB

Community Based DOTS Implementation

Table 6: Technical outcome of community based DOTS implementation

Expected Outcomes		Outcome Indicators	Indicator Definition	Baseline (2011)	Target Y2	Result Y2	Comments
1,1	To increase quality of TB services delivered among all care providers and to bring TB services to door step of people	Proportion of new sputum smear positive TB cases out of suspected TB cases referred by CHWs.	Numerator: Number of new sputum smear positive TB cases identified by CHWs. Denominator: Total number of TB suspected cases referred by CHWs in 13 USAID supported provinces.	7% of suspected TB cases(7/10) (2012)	10% of suspected TB cases(1/10) (2013)	8% of suspected TB cases(8/10)(2013)	Delayed GF contract is reason to down the project achievements. Because CB-DOTS interventions in 9 provinces are playing complementary role to GF round 8 grant
	Increased quality of TB services delivered among all care providers	To coordinate, introduce and implement Community Based DOTS at national and provincial level	Number of provinces implementing CB-DOTS	100% (13/13) (2013)	100% (13/13) (2013)	100% (13/13) 2013	7 provinces are contracted with BRAC. 6 provinces are contracted with BPHS implementers.

During 2009, TB CAP assisted the NTP to pilot the community based DOTS in the four provinces of Badakshan, Baghlan, Jowzjan and Herat in Afghanistan. During TB CARE I year two, this approach was expanded to all 13 USAID supported provinces. TB CARE I has implemented the CB-DOTS approach in six provinces with BPHS implementers (CAF, BDN and SAF) and for seven provinces with BRAC to complement the GF community based DOTS approach. Hereby, TB CARE I reached to its target to contract with BPHS implementers.

Key Achievements

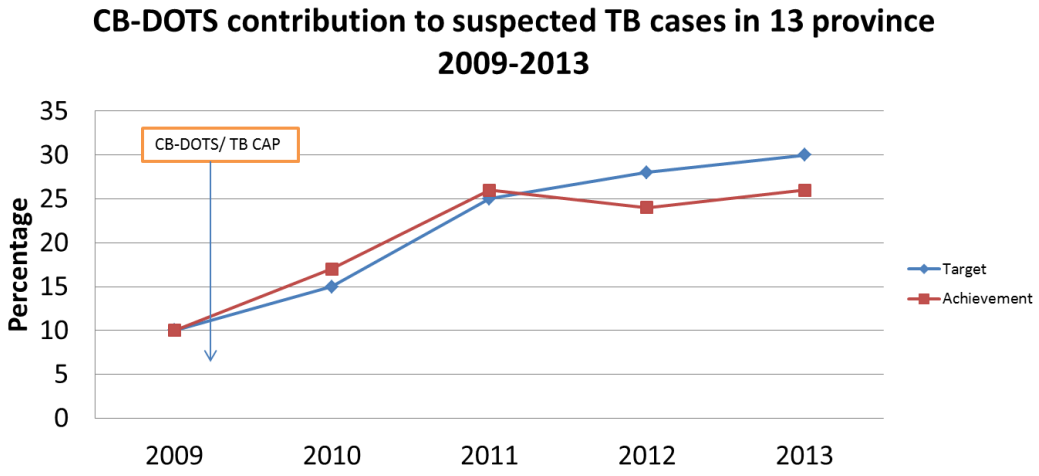
The contribution of CB-DOTS in suspect identification, TB case diagnosis and treatment was remarkable. For example, during APA3, in total over 7,949 suspected TB cases were identified and referred to health facilities by community health workers, which makes up 17% of all suspected TB cases identified in all 13 provinces. Of them 609 (8%) cases were diagnosed as sputum smear positive. Also community health workers played an important role in the provision of TB services at the door step of clients and communities (e.g. treatment success rate for those receiving their daily pills from CHWs was 98%).

Table 7: Comparison of CB-DOTS baseline indicators with achievements (in 6 provinces), 2012-2013

Indicator	Baseline/2012	Performances/APA3
Number (%) of TB Suspects referred by CHWs and community	8,280 (18%)	7,946 (17%)
Number (%) of suspected TB cases referred by CHWs and community and diagnosed as sputum smear positive TB cases	751 (18%)	609 (20%)
Number (%) of TB patients under DOT by CHWs and Community out of all TB patients	1,226 (30%)	1,160 (39%)
Number and % of new SS+ among TB suspects referred by CHWS	751 (9%)	609 (8%)
Treatment Success rate (percentage of success in treatment of TB patients by community and CHWs)	(96%)	(97%)
Number (%) of under 5 children screened for TB	960 (23%)	1,102(35%)
Number (%) of female TB patients	2,752 (66%)	1,927 (64%)
Number (%) of households registered to screen for TB (contact management)	51896(62%)	51896(62%)

In addition, the community based DOTS produced significant results in terms of suspected TB case identification. For instance, by the end of 2012, up to 26% of all suspected TB cases identified in 13 provinces were identified by community health workers. This trend is expected to be continued and reach to 30% in year 2013 (Figure 5).

Figure 5: Role of community health workers in suspected TB case identification



Moreover, TB CARE I has conducted an assessment to identify the role of community based DOTS treatment outcome and home based DOT compared to health facility based DOT. Interestingly, TB treatment success rate was 98% for those TB patients that received their DOT from CHWs compared to 91% treatment success rate for those TB patients who received their DOT from health facilities (Table 8).

Table 8: Contribution of CHWs in treatment outcome

Variable	CHW treatment outcome 2010 N=853	CHW and health facility treatment outcome (2010) N=3205	National level treatment outcome (2010) N=12797
Treatment success rate	**833 (98%)**	**2,909 (90.7%)**	**11,624 (91%)**
Cure rate	**822 (96.4%)**	**2,855 (89%)**	**11,175 (87%)**
Completion rate	**12 (1.2%)**	**54 (1.7%)**	**449 (4%)**
Deaths rate	**10 (1.1%)**	**57 (1.8%)**	**257 (2%)**
Default rate	**3 (0.4%)**	**54 (1.7%)**	**244 (2%)**
Treatment failure rate	**3 (0.4%)**	**25 (0.8%)**	**122 (1%)**
Transfer out rate	**4 (0.4%)**	**160 (5%)**	**550 (4%)**

Challenges and Next Steps

- Low Commitment of HFs staff on CB DOTS implementation.
- Poor supervision of CB DOTS implementation with HFs and HPs level disregarding to feedback
- NGOs were not involved in CB-DOTS in seven provinces
- Insecurity caused limitation to health facilities

Next Steps

- Sub contract with lead NGOs in six provinces (Badakhshan, Baghlan, Jowzjan, Takhar and Faryab and Herat)
- To complement the GF Round 8 CB-DOTS components and sub contract with BRAC in seven provinces

Infection Control

There are 667 health facilities in TB CARE intervention areas that are eligible for TB IC expansion. During APA3, TB CARE l supported NTP the expansion of TB IC measure strategies to 20 additional health facilities in 13 provinces. Collectively, 110 health facilities were covered by TB IC measures in 13 provinces. In short, TB IC measures strategies expansion was raised from 13% (90) in 2012 to 16% (110) in 2013.

Key Results

1. **Assisted NTP to conduct TB IC committee meeting at central level**

12 TB IC committee meetings conducted; the members of the coordinating body were influenced to follow up the decision made by the committee and share the information with provincial TB coordinator (NTP). For example, the committees decided to rearrange the flow of patients and renovate some health facilities by installing fans and opening new windows in health facilities through their respected BPHS implementing NGOs. The NGO and provincial team coordinated with TB CARE I and NTP and these facilities were renovated.

2. **Assisted NTP to establish TB IC committee at health facility level**

20 TB IC committees were established in 20 health facilities to plan, implement and monitor TB IC measure strategies. They assessed the health facilities for TBIC, identified the areas of higher risk, developed plan for improvements.

3. **Assisted NTP to conduct TB IC committee meeting at Health Facility level**

240 TB IC committee meetings were conducted in 20 HFs. Collectively 1,320 meetings were conducted in 110 HFs to discuss achievements, challenges, implementation, and monitor the progress and set target for next month. The committees used a standard assessment tool for monitoring progress.

4. **Assisted NTP to build the capacity of front line health care workers on TB IC SOP and assessment tool**

332 front line health care workers, including 28 females, were trained on the TB IC SOPs and assessment tool to avoid contracting TB and to better plan and implement TB IC control strategies.

5. **Provided financial and technical assistance to conduct minor renovations in assessed Health facilities**

20 health facilities were assessed through the TB IC assessment tool and conducted minor renovations to provide healthy environment to health care workers and clients. The renovation included installation of fans, opening new windows or doors and moving waiting areas to open areas.

6. **TB IC community based IEC material developed**

To improve community awareness and clients who come to health facilities, four kinds of posters were developed and focused on ways how to protect oneself from contracting TB bacilli and how to reduce the spread of the bacilli to the environment. 15,000 posters are planned to be printed and distributed country wide by end of Nov 2013.

7. **Assisted NTP to conduct supervisory visit from Health facilities to supportively supervise TB IC control strategies.**

26 supervisory visits were conducted from health facilities in 13 USAID provinces to observe, discuss and provide on the job training in terms of the implementation and how to overcome with the existed challenges. This was a joint visit conducted by staff from the NTP, TB CARE I, the provincial health

office and implementing NGOs. The common challenge was implementation of SOPs for TBIC and in general the lack of a proper screening system at health facilities for identification of presumptive TB cases. Limited health care staff and low knowledge of NGO staff on TBIC are two challenges that NTP Afghanistan was faced with. TB CARE I ensured the system strengthening to increase the capacity to identifying suspected TB case and case detection.

In summary, the TB IC planned activities were able to achieve its set targets for APA3. Table 9, illustrates the comparison of planned activities against achievement in during APA3 (Oct 2012-Sep 2013).

Table 9: TB IC planned activities and achievements during APA3:

Activities	**Planned**	**Achievements**
Expansion of TB IC measures to additional Health Facilities	20	20
Conducted TB IC committee meeting at facility level	240	240
Conducted TB IC committee meeting at central level	12	12
Conducted training for front line health care workers on assessment tool	150	323
Conduct supervision/monitoring visits from TB IC expanded HFs	26	26
Conducted minor renovation in 13 provinces HFs	29	20
Developed, Print and distributed IEC material	developed	Print 5,000 copies

TB infection control implementation improved the staff capacity in TB case finding (e.g the suspect identification time from the clients arrival in infection control health facilities was 23 minutes while in control facilities it was 52 minutes and time from a suspected TB case arrival till his/her departure took 80 minutes in the intervention sites while in control areas it took 178 minutes). Moreover, the TBIC measures resulted in improved working conditions and decreased risk to TB to a great extent for instance out of 120 health care staff screened for TB in TB IC health facilities only 11% were suspected TB cases and three diagnosed as sputum smear positive, while, in control health facilities this figure was 17% and seven diagnosed as sputum smear positive TB cases.

Health System Strengthening (HSS)

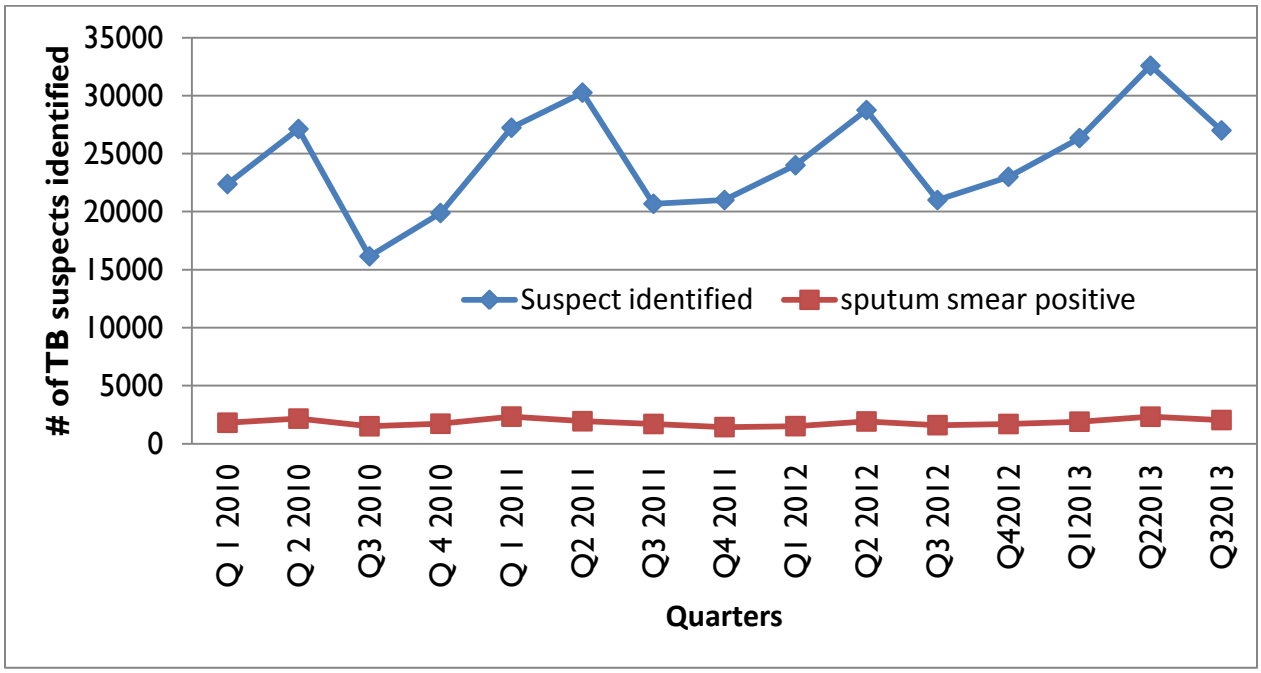
Health system strengthening is one of the technical areas that MSH has been working on since the initiation of USAID's TB project in 2005. This essential area has improved significantly in year three of TB CARE I project. During APA3, the NTP guideline, SOPs for case detection, treatment and child TB were revised according to the WHO recommendations. Also, the IEC materials for World TB day were developed and disseminated to all health facilities in the country. During APA3, a TOT was conducted for 22 health professionals from the central and provincial NTP to use these professionals as master trainers in the provinces. Moreover, the project management cycle workshop was conducted for the NTP central and provincial team by KNCV (29 health professional participated), TB CAREI supported the World TB celebration in 13 USAID supported provinces and **1,198,000** people were covered by this activity. In total, 400 individuals were trained on SOPs for case detection, TBIC, and treatment using TB CARE I funds during APA 3. In total 12,761 staff were trained. Joint supervisory and monitoring visits were conducted from 310 health facilities in 13 USAID supported provinces and we reached 85% of our targets.

Key Results

During year three of the TB CARE I project, we place an emphasis on SOPs implementation for case detection, treatment, TB IC, and TB in children. Collectively, 400 individuals from various disciplines were trained on project cycle management, training of trainers, initial SOPs training for case detection, treatment, TB IC, TB in children, CB- DOTS and in TB monitoring and evaluation.

Also, TB CARE I, jointly with the NTP central and provincial team, conducted supervisory and monitoring visits from 210 health facilities in 13 provinces. The SOPs implementation has resulted in increased access to TB services in the country. During APA 3 for instance, approximately 103,335 suspected TB cases were identified and tested for sputum smear microscopy, and of them, over 7,866 were diagnosed as sputum smear positive TB and 17,631 as all forms of TB cases. The figure 6 identifies the trend of suspected TB and sputum smear positive TB cases in 13 TB CARE I intervention provinces form 2007-2013. Also, TB CARE I interventions resulted in improved quality of care e.g. the treatment success rate increased to 90% in 2013 from 83% in 2009 and sputum smear positivity rate was 7.5%.

Figure 6: Trend of suspected TB cases identified and screen for TB in TB CARE I intervention areas



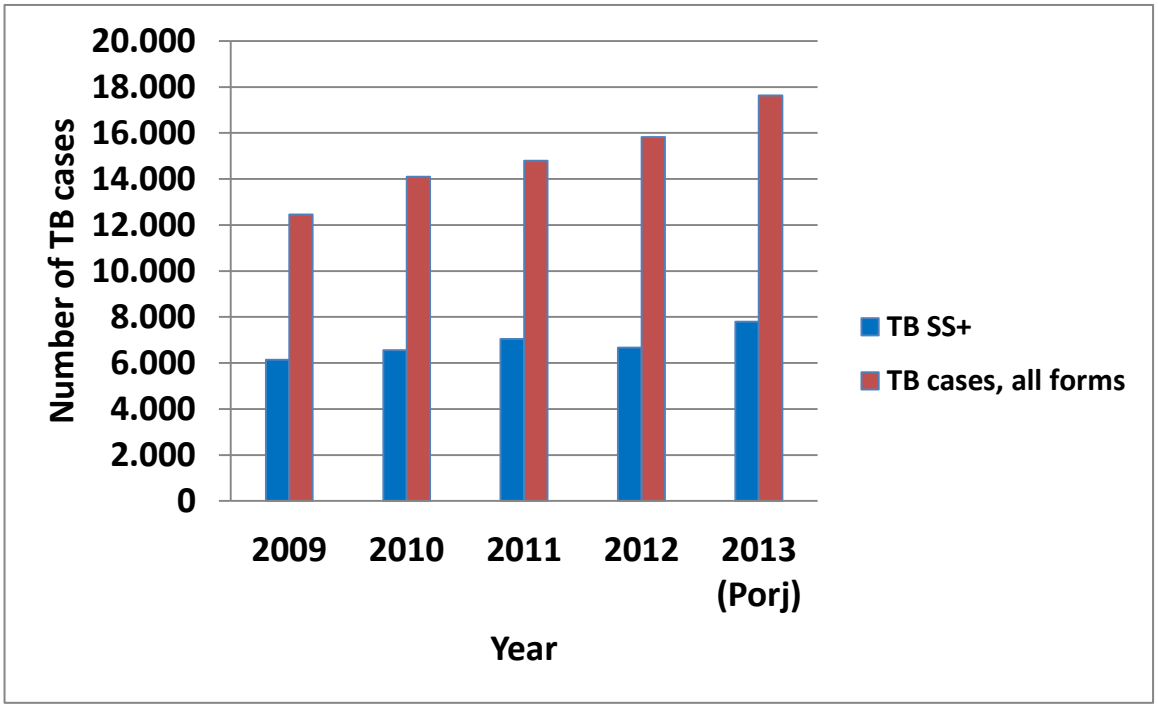
In summary, the TB CARE I intervention led to increased case notification for all types and sputum smear positive TB cases. For example, there is a 42% increase in all types of TB cases, which is an increase from 12,454 to 17,631. Also, there was a 17% increase in notification of new sputum smear positive TB cases e.g. it ascended from 6,139 in 2009 to 7,866 in 2013. Moreover, the treatment success rate rose by 7%, from 83% in 2009 to 90% in 2012 (Table 10).

Table 10: Comparison of performance between TB CARE I intervention areas and control areas, 2009-2013

	Intervention Group Health Facilities (13 provinces)					Control Group Health Facilities (21 provinces)			
Indicator	**2009**	**2011**	**2012**	**2013 (Projection for Q4 3013)**	**% change (2009-2012)**	**2009**	**2011**	**2012**	**% change (2009-2012)**
TB suspected cases identified	**49,630**	**99,272**	**96,750**	**103,335**	**108% increase**	**45,812**	**93,730**	**84,622**	**85% Increase**
TB sputum smear positive cases notified	**6,139**	**7,051**	**6,676**	**7,800**	**27% (CI-95%, P<0.014) increase**	**6,358**	**6,750**	**6,547**	**3% increase**
TB cases notified, all forms	**12,454**	**14,792**	**15,825**	**17,631**	**42% increase (P<0.0 0001)**	**13,904**	**13,372**	**13,545**	**2.6% decline**
Treatment success rate	**83 %**	**89 %**	**90%**	**NA**	**7% increase**	**89 %**	**92 %**	**92%**	**3% increase**

Additionally, TB CARE I intervention resulted in a changing trend of TB case notification in Afghanistan. For example, historical data shows that fewer cases were notified in USAID supported provinces before TB CARE I and TB CAP began (Figure 7). Now, more TB cases are notified in USAID supported 13 provinces compared to non-USAID supported 21 provinces (Table 10).

Figure 7: Trend of TB case notified in TB CARE I intervention areas 2009-2013



Challenges and Next Steps

High staff turnover at the provincial level: during 2012, the NTP in Afghanistan was faced with a challenge of delayed approval of global fund phase II, round 8. Thus, the NTP was not able to train newly hired staff on time and fewer health staff were trained on the SOPs for case detection and treatment in TB CARE I intervention areas (13 USAID supported provinces). Delays in the payment of salaries to frontline staff by BPHS implementer and low scale salaries resulted in higher staff turnover in remote and hard to reach provinces.

Low MOPH commitment: Currently, the government share of TB control is approximately 1% of total expenditure in TB. The NTP is currently faced with the challenge of paying incentives to its staff at the national level. The government payment to NTP staff on average is less than USD 200 per month per person. This caused greater demotivation of NTP staff at central and provincial levels and resulted in delayed implementation. Also, during 2013 the NTP organogram was redesigned by MoPH and the technical staff of central NTP decreased to 13 from 30. To support all TB activities in 34 provinces with fewer technical staff from NTP and TB CARE I remains a challenge.

Low central and provincial NTP coordination: The NTP, as a vertical program, is faced with a greater integration challenges at the central and provincial levels. This requires a high level of coordination and collaboration at various levels. TB CARE I's strategy is to accelerate the integration process at the various levels of the NTP but, in a few cases, we were faced with coordination challenges at the provincial and central levels.

Insecurity: The deteriorating security in many of provinces has caused delayed activity implementation. However, TB CARE I was able to implement all the activities in all insecure provinces by close coordination with provincial team.

Monitoring & Evaluation, Surveillance and OR

Key Results

During year three of TB CARE I the NTP assisted in with maintenance of the electronic reporting system. The NTP also assisted in the conduction of quarterly review workshops in all 13 intervention provinces. During these workshops the health care staffs, NGOs and provincial public health offices were assisted with analysis, data interpretation, and goal setting for the next quarters. In total, 600 staffs attended these events each quarter bringing the annual total of attendees to 2,400.

Furthermore, the NTP assisted in the execution of the national annual evaluation workshop in May 2013. During the workshop 134 individuals, including senior staff from the ministry of public health, NGOs, provincial l health staff, the NTP's technical and managerial staff and provincial TB coordinators, attended. The TB performances of 2011 and 2012 were reviewed and discussed and new targets were set for next quarter. The summary of main decisions is outlined in table 11.

Table 11: Summary of recommendations from the National Evaluation Workshop

Challenge	Recommendation
Case notification of 115/100,000 population and case detection for all form TB is 57%.	Improve the implementation of the following strategies: SOPs for case detection and treatment, sputum/slide sending, CB-DOTS, Urban DOTS, PPM, mass screening of returnees, prisoners, contact investigation and screening of children among household contacts. The BPHS implementers, NTP and partners such as TB CARE I, WHO, JICA and LEPCO agreed to, continue their support to NTP to reach the target on 5% annual increase in case detection and notification for sputum smear positive TB cases and all form of TB cases and sustain the TSR in new TB SS+ of 91 %.
Low suspect and TB screening for TB National value shows = 2.6%	The BPHS implementers, NTP, GCMU and partners agreed to work together to increase TB suspect identification, examination and immediate treatment initiation for those turned to be TB SS+ using innovative approaches mentioned above. The target for next year would be increase to 5% for this variable.
Weak quality of diagnosis on TB cases Sputum smear not done = 9% Pulmonary new sputum smear positive out of all TB cases 45%	Stick to SOPs for case detection and treatment, improved quality of laboratory microscopes, train the laboratory staff and improve EQA for SSM. The target agreed was to reduce to "0" the number of TB cases with sputum smear not done.
Drug resistance TB	Establishment of DST in Afghanistan and implementation of MDR TB program, which will be focusing on offer treatment to the MDR TB patients identified.
Coordination of PTCs with BPHS implementers and MOPH/GCMU	The Provincial TB Coordinators (PTCs), BPHS implementers at provincial levels and NTP, partners and MOPH/GCMU at national levels should ensure high level of coordination and collaboration though their regular participation in the TB TASK force; regular provincial quarterly reviews meetings and annual evaluation meeting in 2014.
DOTS implementation at Urban setting	Continue the implementation of the Urban DOTS program in Kabul and scale up to densely populated areas such and other cities in Afghanistan to increase the key TB indicators to national level. Urban DOTS program in Kabul should include the components of TB in children and contact investigation.

CB DOTS	Community and community health workers played an important role in terms of TB suspect identification, referrals, early case detection and treatment outcome. This, mechanism should be sustained in the current CB DOTS provinces and expanded accordingly the availability of financial resources from GF and TB CARE I.
TB surveillance and operational research	Enhancement and improvement of data quality could be assessed through implementation of TBIS and electronic reporting. TB CARE I should train the PTCs and HMIS officers on analysis version of TBIS.
SOP implementation	BPHS implementers and PTCs should improve the coordination to assure the properly implementation of SOP for case detection at health facility level countrywide.
Sputum/slide sending mechanism	The newly initiated approach should be implemented and PTCs has the responsibility to enhance successful implementation and monitoring of the process.
PPM implementation	PTCs at main provinces has to focus on engagement of private and public health facilities that assists in early case detection and treatment to TB patients
Screening of returnees and prisoners	PTCs and implementers partners should prepare and implement local plans to increasing access to vulnerable groups such as prisoners and returnees
Cross boarder TB	Considering higher transport of Afghan refugees from Pakistan and Iran, the NTP and partners should prepare and implement a plan for referral system of TB patients from Afghanistan, Pakistan and Iran.
Delayed processing the financial documents	It was agreed that the PTCs and NTP central team should facilitate the submission of documents to partners and government/MOPH for accelerating the clearance and on time payment of personnel.

All participants agreed on targets, illustrated in table 12, to be achieved for the year 2013.

Table 12: TB program key indicators baseline and target set at national evaluation workshop 2013

Indicators	**Baseline 2012**	**Target 2013**
Case notification rate for all for TB in 100.000 population	116	123
Presumptive TB cases identification rate among OPD attendees	3%	5%
Presumptive TB cases examination rate	90%	97%
Sputum smear positivity rate among presumptive TB cases examined	7%	8%
Proportion of new sputum smear positive TB cases among all form TB cases	45%	57%

Sputum smear conversion rate at the end of month 2/3 of treatment initiation	91%	93%
Treatment success rate	91%	92%
Cure rate	89%	91%
Lost to follow up rate	7%	5%
Transfer out rate	10%	6%

Moreover, the NTP was assisted in the conduction of two operational research on TB data accuracy and treatment outcome distribution among female TB patients. The findings illustrated the significant improvement in TB data accuracy since the 2008 baseline e.g. the data accuracy improved by 11% from 79% in 2008 to 90% in 2012. The contribution of TB CARE I in strengthening M&E, surveillance and OR such as the implementation of electronic reporting system (TB IS database), quarterly review workshop conduction, supervisory/monitoring visits and training of health care staff on DOTS resulted in improved quality of TB data in Afghanistan. The brief findings of data accuracy assessment is summarized in table 13.

Table 13: Summary findings of data accuracy assessment

Variable	**Accuracy**
Case notification	**95.67%**
TB suspect management	**85.86%**
Sputum Smear Conversion rate	**92%**
Contact management	**88%**
Overall data accuracy for Afghanistan	**90%**
Overall Improvement in data accuracy 2008-2012	**11% and we achieved the goal set in The Hague (5%/year)**

The abstracts of these two operational researches will be presented at the 44th Union Conference as posters. Moreover, the NTP was assisted in protocol development, conduction, implementation and report writing of research studies. For instance, five abstracts were submitted to 44th Union conference on TB and Lung diseases and all were accepted for the poster presentation.